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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,926	09/24/2003	Jean M. Beaupre	END5009USNP	4594

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EXAMINER

CHEN, VICTORIA W

ART UNIT	PAPER NUMBER
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3739

MAIL DATE	DELIVERY MODE
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09/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/669,926	Applicant(s) BEAUPRE, JEAN M.	
	Examiner VICTORIA W. CHEN	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-17, 20, 21 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-17, 20, 21 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/18/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/18/09 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17, 20, 21, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haibel, Jr. et al. (US 6254623 B1) in view of Bromfield et al. (US 5879364).

Regarding claim 15, Haibel teaches an ultrasonic blade [96], comprising a first portion [50], a second portion [98] and a third portion [48 & 46] wherein the first portion comprises a first cross-sectional area, the second and third portions comprise a second cross-sectional area less than the first cross-sectional area [col. 5, ll. 29-32] and wherein the first portion comprises a distal end and a proximal end, the distal end connected to the second portion and the proximal end connected to the third portion [Fig. 1]. Haibel also discloses the third portion [48 & 46] defines a first anti-node [col. 4, ll. 60-62] and the second portion [98] defines a second anti-node

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[col. 5, ll. 44-47], which defines a one-half wave segment. Haibel further teaches the waveguide [96] capable of being extended to lengths of integer numbers of one half wavelengths [col. 4, ll. 64-66], but fails to specifically teach increasing the length by adding more identical half-wave segments together. Bromfield et al. teaches an ultrasonic blade composed of a plurality of identical one half-wave segments [15] attached end to end in order to increase the length of the transducer as desired [col. 4, ll. 1-11]. It would have been obvious to one of ordinary skill in the art at the time of invention to lengthen an ultrasonic blade as taught by Haibel by putting more than one half-wave segments together as taught by Bromfield in order to increase the length of the transducer as desired.

Regarding claim 16, Haibel discloses an ultrasonic surgical instrument comprising a housing [100], a tubular sheath [36] having a proximal end joined to the housing, an ultrasonic waveguide [96] having an end effector [98] extending distally of the distal end of the tubular sheath, the waveguide comprising a first portion [50], a second portion [98] and a third portion [48 & 46] wherein the first portion comprises a first cross-sectional area, the second and third portions comprise a second cross-sectional area less than the first cross-sectional area [col. 5, ll. 29-32] and wherein the first portion comprises a distal end and a proximal end, the distal end connected to the second portion and the proximal end connected to the third portion [Fig. 1]. Haibel also discloses the third portion [48 & 46] defines a first anti-node [col. 4, ll. 60-62] and the second portion [98] defines a second anti-node [col. 5, ll. 44-47], which defines a one-half wave segment. Haibel further teaches the waveguide [96] capable of being extended to lengths of integer numbers of one half wavelengths [col. 4, ll. 64-66], but fails to specifically teach increasing the length by adding more identical half-wave segments together. Bromfield et al.

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teaches an ultrasonic blade composed of a plurality of identical one half-wave segments [15] attached end to end in order to increase the length of the transducer as desired [col. 4, ll. 1-11]. It would have been obvious to one of ordinary skill in the art at the time of invention to lengthen an ultrasonic blade as taught by Haibel by putting more than one half-wave segments together as taught by Bromfield in order to increase the length of the transducer as desired.

Regarding claim 17, Haibel discloses a clamp arm [42] pivotally mounted on the distal end of the sheath [col. 5, ll. 55-56].

Regarding claim 20, Haibel discloses the first cross-sectional area is constant [col. 5, 37-38].

Regarding claim 21, Haibel discloses the second cross-section area [here interpreted as the cross-sectional area of 48] is constant [col. 5, ll. 28-29].

Regarding claim 30, Haibel discloses an ultrasonic surgical blade [96] comprising a first portion [50], a second portion [98] and a third portion [48 & 46] wherein the first portion comprises a first cross-sectional area, the second and third portions each defining a length and comprising a variable cross-sectional area along each length [variable cross sectional area of the second portion can be see in Fig. 3, variable cross sectional area of the third portion can be seen in Fig. 1, change in diameter between elements 48 to 46] and wherein the first portion comprises a distal end and a proximal end, the distal end connected to the second portion and the proximal end connected to the third portion [Fig. 1]. Haibel also teaches the blade is capable of having more than one half wave segments [col. 4, ll. 64-66] and that the third portion [48 & 46] defines a first anti-node [col. 4, ll. 60-62] and the second portion [98] defines a second anti-node [col. 5, ll. 44-47], which defines a one-half wave segment. Haibel further teaches the waveguide [96]

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capable of being extended to lengths of integer numbers of one half wavelengths [col. 4, ll. 64-66], but fails to specifically teach increasing the length by adding more identical half-wave segments together. Bromfield et al. teaches an ultrasonic blade composed of a plurality of identical one half-wave segments [15] attached end to end in order to increase the length of the transducer as desired [col. 4, ll. 1-11]. It would have been obvious to one of ordinary skill in the art at the time of invention to lengthen an ultrasonic blade as taught by Haibel by putting more than one half-wave segments together as taught by Bromfield in order to increase the length of the transducer as desired.

Response to Arguments

Applicant's arguments, filed 8/18/09, with respect to the rejection(s) of claim(s) 15-17, 20, 21 and 30 under 35 USC 102(b) under Haibel have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Haibel in view of Bromfield, as seen above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTORIA W. CHEN whose telephone number is (571)272-3356. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victoria W Chen/
Examiner, Art Unit 3739

/Roy D. Gibson/
Primary Examiner, Art Unit 3739